

March 11, 2003  
1420 East 6th Ave.  
P.O. Box 200701  
Helena, MT 59620-0701

Environmental Quality Council  
Montana Department of Environmental Quality  
Montana Department of Fish, Wildlife and Parks  
    Fisheries Division  
    Endangered Species Coordinator  
    Native Species Coordinator, Fisheries  
    Missoula Office  
MT Environmental Information Center  
Montana Audubon Council  
State Historic Preservation Office  
Bitterroot Conservation District  
U.S. Army Corp of Engineers, Helena  
U.S. Fish and Wildlife Service, Helena  
Montana State Library, Helena  
Bitterroot Chapter, Trout Unlimited  
Sula Ranger District, 7338 Highway 93 South, Sula, MT 59871  
Robert and Nancy Davis, P.O. Box 663, Idyllwild, CA 92549

Ladies and Gentlemen:

Please find enclosed an Environmental Assessment prepared for the Future Fisheries Improvement Program. The Program tentatively plans to provide funding to a project calling for the restoration of a channelized reach of Laird Creek. Laird Creek is a tributary to the East Fork of the Bitterroot River located approximately 4 miles northwest of the community of Sula in Ravalli County.

Please submit any comments that you have by 5:00 P.M., April 14, 2003 to the Department of Fish, Wildlife and Parks in Helena at the address listed above. Completion of this project is contingent upon approval being granted by the Fish, Wildlife and Parks Commission. If you have any questions, feel free to contact me at (406) 444-2432. Please note that this draft EA will be considered as final if no substantive comments are received by the deadline listed above.

Sincerely,

Mark Lere, Program Officer  
Habitat Protection Bureau  
Fisheries Division  
e-mail: mlere@mt.state.us

**ENVIRONMENTAL ASSESSMENT**  
Fisheries Division  
Montana Fish, Wildlife and Parks  
Laird Creek Channel Restoration Project

**General Purpose:** The 1995 Montana Legislature enacted statute 87-1-272 through 273 that directs the Department to administer a Future Fisheries Improvement Program. The program involves providing funding for physical projects to restore degraded fish habitat in rivers and lakes for the purposes of improving wild fisheries. The legislature established a funding account to help accomplish this goal. Additionally, the 1999 Montana Legislature amended statute sections 87-1-273, 15-38-202 and Section 5, Chapter 463, Laws of 1995 to create a bull trout and cutthroat trout enhancement program. The program calls for the enhancement of bull trout and cutthroat trout through habitat restoration, natural reproduction and reductions in species competition by way of the Future Fisheries Program.

The Future Fisheries Improvement Program is proposing to provide funding for a project calling for the restoration of a channelized reach of Laird Creek by constructing a Rosgen “B” channel type within the stream’s original floodplain. Laird Creek is a small tributary that enters the East Fork of the Bitterroot River approximately 4 miles northwest of the community of Sula. The intent of the project is to improve aquatic habitat for both bull trout and westslope cutthroat trout by increasing pool habitat, channel complexity and restoring floodplain function. Additionally, the project is intended to reduce the threat of flooding to adjacent residences. The project site is located on property owned by Robert and Nancy Davis.

**I. Location of Project:** This project will be conducted on lower Laird Creek, a tributary to the East Fork of the Bitterroot River, located approximately 4 miles northwest of the community of Sula within Township 1 North, Range 20 West, Section 2 in Ravalli County (see Figure 1).

**II. Need for the Project:** One goal within Montana Fish, Wildlife and Parks six-year operations plan for the fisheries program is to “restore and enhance degraded habitats” by implementing habitat restoration projects and administering the Future Fisheries Improvement Program to restore important habitats on public and private lands. This proposed project would help achieve this goal.

In the past, a portion of Laird Creek was moved against the north wall of the valley to make room for residential development. Currently, this channelized reach of stream is perched one to two feet above the low point in the valley. The Bitterroot fire of 2000 severely burned a substantial portion of the Laird Creek drainage and rain events during the summer of 2001 caused severe erosion in this burned drainage. Excessive amounts of sediment entering the stream channel have severely aggraded the channelized portion of Laird Creek, resulting in an unstable stream channel that provides very poor habitat for fish. This channel de-stabilization likely has reduced migratory connectivity between

Laird Creek and the East Fork of the Bitterroot River. The unstable channel also threatens to flood several home sites in the future.

**Scope of the Project:** The project proposes to re-construct approximately 700 feet of Laird Creek into a Rosgen “B” channel type within the low point of the valley (Figure 2). This reach of Laird Creek is located approximately 0.25 miles upstream from the confluence of the East Fork of the Bitterroot River. The newly constructed channel will be capable of conveying a bankfull discharge of 55 cubic feet per second. The constructed floodplain will be built to accommodate a 100-year flood event. Approximately 17 rock and log grade control structures will be installed into the new channel to provide for stability and to create pool habitat. Additional woody debris will be incorporated into these structures to provide for overhead cover. Woody shrubs will be planted along the riparian corridor. New channel construction will be conducted in dry conditions except when the newly constructed channel is re-connected with the existing channel. The project is expected to cost \$31,046.00. Of this total, the Future Fisheries Improvement Program would be contributing up to \$12,000.00.

#### **IV. Environmental Impact Checklist:**

Please see attached checklist.

#### **V. Explanation of Impacts to the Physical Environment:**

##### **1. Terrestrial and aquatic life and habitats.**

There will be no adverse affects to fish as a result of the proposed project. Implementation of this project would provide bull trout and westslope cutthroat trout enhanced access to and utilization of Laird Creek. Ultimately, the number of adult bull trout and cutthroat trout would be expected to increase in the East Fork of the Bitterroot River.

##### **2. Water quantity, quality and distribution.**

Short-term increases in turbidity may occur during project construction. To minimize turbidity, construction will occur during a low flow period and operation of equipment in the stream channel will be minimized to the extent practicable. Channel construction will be conducted in dry conditions except when the new channel is re-connected to the existing channel. The Department of Environmental Quality will be contacted to determine narrative conditions required to meet short-term water quality standards and protect aquatic biota. A 310 permit will be obtained from the local Conservation District. The U.S. Army Corp of Engineers have determined that the proposed work is authorized by the Nationwide Permit 27 found in the January 15, 2002 Federal Register (Vol. 67, No. 10, Part II) under federal Clean Water Act (404 permit). In the long term, restoration of an unstable channel back to the low point in the valley is expected to improve water quality in lower Laird Creek.

3. Geology and soil quality, stability and moisture.

Soils along the stream margin would be disturbed during construction, but would be stabilized with re-vegetation efforts.

4. Vegetation cover, quantity and quality.

Riparian vegetation and cover would be disturbed during the period of construction. Proposed re-vegetation efforts would act to mitigate these disturbances.

5. Aesthetics.

Aesthetics would be negatively affected during project construction because of ground disturbance and the presence of heavy equipment. In the long term, aesthetics are expected to be enhanced by restoring channel stability and by planting woody shrubs within the riparian corridor.

7. Unique, endangered, fragile, or limited environmental resources.

Bull trout are listed as threatened under the Endangered Species Act and westslope cutthroat trout are classified as a “Species of Special Concern” in Montana because of their shrinking distribution and declining numbers. Fluvial bull trout and westslope cutthroat trout are known to utilize Laird Creek for spawning and rearing. Re-constructing this unstable reach of Laird Creek will restore migratory connectivity with the East Fork of the Bitterroot River and will provide for greater diversity in aquatic habitat. The project is expected to increase recruitment of bull trout and westslope cutthroat trout to the East Fork of the Bitterroot River. Because Laird Creek supports bull trout, a listed species, the project will be included in Montana Fish, Wildlife and Parks Section 6 conservation plan with the U.S. Fish and Wildlife Service.

9. Historic and archaeological sites

The proposed project requires a Nationwide Permit through the Army Corp of Engineers (COE) 404 permit process. Therefore, the State Historic Preservation Office will be contacted to determine the need for compliance with the federal historic preservation regulations. The project will not begin until a cultural clearance is granted.

**VI. Explanation of Impacts on the Human Environment.**

7. Access to & quality of recreational activities.

It is anticipated that this project would improve overall aquatic habitat in lower Laird Creek and, as a result, would be expected to improve recruitment of bull trout and westslope cutthroat trout to the East Fork of the Bitterroot River.

## **VII. Discussion and Evaluation of Reasonable Alternatives.**

### **1. No Action Alternative**

If no action is taken, the lower reach of Laird Creek will continued to be unstable. This unstable reach of stream will continue to threatened several residences in the drainage and remain under-utilized by bull trout and westslope cutthroat trout. The full potential for providing recruitment of juvenile fish to the East Fork Bitterroot River will not be realized.

### **2. Return Laird Creek back to old channelized reach**

Returning Laird Creek back to the channelized reach would not resolve the issues associated with channel instability. Additionally, this alternative would not diminish the threat of flooding at adjacent residences. This reach would remain perched 1 to 2 feet above the low point in the valley, resulting in continued channel instability and poor aquatic habitat.

### **3. The Proposed Alternative**

The proposed alternative is designed to restore a 700-foot channelized reach of Laird Creek. This alternative would return the channel back to the low point in the valley and would construct a more stable step-pool channel form. The newly constructed channel would provide for greater habitat complexity and would provide migratory connectivity to the East Fork of the Bitterroot River. This alternative would be expected to improve fish and wildlife habitat in Laird Creek and to enhance recruitment of fish the to the East Fork Bitterroot River.

## **VIII. Environmental Assessment Conclusion Section**

### **1. Is an EIS required? No.**

We conclude from this review that the proposed activities will have a positive impact on the physical and human environment.

### **2. Level of public involvement.**

The proposed project was reviewed and supported by the public review panel of the Future Fisheries Improvement Program. The proposed project also will be reviewed by the Fish, Wildlife and Parks Commission and will be contingent upon their approval. The Environmental Assessment (EA) is being distributed to all individuals and groups listed on the cover

letter. The EA also will be published on Montana Fish, Wildlife and Parks web page: [fwp.state.mt.us](http://fwp.state.mt.us).

3. Duration of comment period?

Public comment will be accepted through 5:00 P.M. on April 14, 2003.

4. Person responsible for preparing the EA.

Mark Lere, Program Officer  
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Fisheries Division  
Montana Department of Fish, Wildlife and Parks  
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**MONTANA DEPARTMENT OF FISH, WILDLIFE AND PARKS**  
1420 E 6th Ave, PO BOX 200701, Helena, MT 59620-0701  
(406) 444-2535

**ENVIRONMENTAL ASSESSMENT**

Project Title Laird Creek Channel Restoration Project

Division/Bureau Fisheries Division-Future Fisheries Improvement

Description of Project The Future Fisheries Improvement Program is proposing to provide funding to a project calling for the restoration of a channelized reach of Laird Creek. The intent of the project is to improve aquatic habitat for both bull trout and westslope cutthroat trout and reduce the threat of flooding to local residences. The proposed project is located on property owned by Robert and Nancy Davis approximately 4 miles northwest of the community of Sula in Ravalli County.

**POTENTIAL IMPACT ON PHYSICAL ENVIRONMENT**

	MAJOR	MODERATE	MINOR	NONE	UNKNOWN	COMMENTS ON ATTACHED PAGES
1. Terrestrial & aquatic life and habitats			X			X
2. Water quality, quantity & distribution			X			X
3. Geology & soil quality, stability & moisture			X			X
4. Vegetation cover, quantity & quality			X			X
5. Aesthetics			X			X
6. Air quality				X		
7. Unique, endangered, fragile, or limited environmental resources			X			X
8. Demands on environmental resources of land, water, air & energy				X		
9. Historical & archaeological sites				X		X

# POTENTIAL IMPACTS ON THE HUMAN ENVIRONMENT

	MAJOR	MODERATE	MINOR	NONE	UNKNOWN	COMMENTS ON ATTACHED PAGES
1. Social structures & mores				X		
2. Cultural uniqueness & diversity				X		
3. Local & state tax base & tax revenue				X		
4. Agricultural or industrial production				X		
5. Human health				X		
6. Quantity & distribution of community & personal income				X		
7. Access to & quality of recreational and wilderness activities			X			X
8. Quantity & distribution of employment				X		
9. Distribution & density of population & housing				X		
10. Demands for government services				X		
11. Industrial & commercial activity				X		
12. Demands for energy				X		
13. Locally adopted environmental plans & goals				X		
14. Transportation networks & traffic flows				X		

Other groups or agencies contacted or which may have overlapping jurisdiction Bitterroot Conservation District, US Fish and Wildlife Service, US Army Corp of Engineers, Montana Department of Environmental Quality, State Historical Preservation Office  
Individuals or groups contributing to this EA: Troy Brandt and Mark Vander Veldon, Water Consulting, Inc.  
Recommendation concerning preparation of EIS: No EIS required.



EA prepared by: Mark Lere  
Date: February 19, 2003